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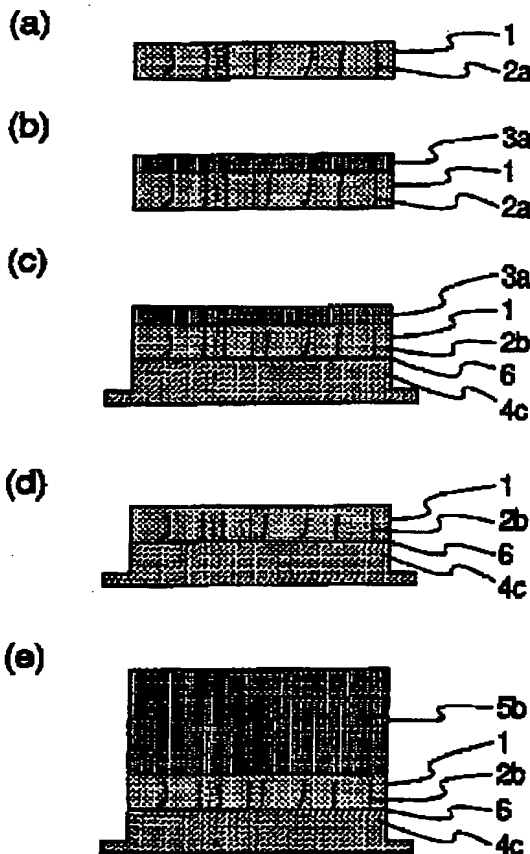
APPLICATION DATE : 31-07-98
APPLICATION NUMBER : 10230279

APPLICANT : TOYOTA CENTRAL RES & DEV LAB
INC;

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TITLE : PRODUCTION OF SILICON CARBIDE
SINGLE CRYSTAL



ABSTRACT : PROBLEM TO BE SOLVED: To produce a silicon carbide single crystal having no micropipe defect with a simpler process while saving labor and time.

SOLUTION: This production comprises: a first stage for forming a silicon carbide coating layer 3a on a silicon carbide single crystal substrate 1 having through-micropipe defects 2a by a CVD(chemical vapor deposition) method or the like; a second stage for subjecting the silicon carbide single crystal substrate 1 provided with the silicon carbide coating layer 3a to heat treatment to plug at least the ends of the micropipe defects 2a, being on the side of the coating layer 3a; a third stage for removing the silicon carbide coating layer 3a by thermal etching to expose the surface in which the micropipe defects 2a of the silicon carbide single crystal substrate 1 are plugged, to the outside; and a fourth stage for growing a silicon carbide single crystal 5b having no micropipe defect with the exposed surface as a seed crystal.

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